

Identity Dispersion: Flexibility, Uncertainty, or Inconsistency?



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Abstract Variability in the meanings of an identity (identity dispersion) have had two contrasting interpretations. On the one hand, drawing on uncertainty-identity theory within social identity theory, such variability may indicate uncertainty in the identity, an aversive state leading to negative feelings. On the other hand, identity theory suggests that such variability may indicate flexibility in the identity that reduces the negative impact of identity nonverification and allows people to feel more positively. The present paper brings together data on six identities (gender, friend, worker, student, moral, and spouse) to test the negative impact of uncertainty and/or the positive impact of flexibility. Results show that both effects occur, but further analyses suggest that identity dispersion may not represent either flexibility nor uncertainty. In a second study using longitudinal data, dispersion appears to result from inconsistencies in the identity meanings that lead to both cognitive dissonance (producing the negative effects) and a wider range of held identity meanings that reduces the negative impact of nonverification (Festinger 1957).

Keywords Identity · Identity verification · Identity dispersion · Identity uncertainty · Identity flexibility

1 Introduction

The meanings that define an identity have generally been understood to reflect points on semantic dimensions that define the identity. For the student identity, for example, students may see themselves as very academically oriented, slightly social, and moderately assertive on semantic dimensions (Reitzes and Burke 1980). The point interpretation has worked well for many applications of identity theory (Burke and

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Stets 2009), but recently there is a revived interest in the idea of people holding a distribution of identity meanings around the point. The point represents the central tendency of the distribution, but the degree of dispersion of meanings around that central point has gained some interest as representing additional aspects of identities that have not received much attention. In the present paper, I explore the implications of this aspect, i.e., dispersion, of identities. I begin with a brief description of the nature of identities and identity theory, and then talk about the two interpretations of identity dispersion that have received some investigation, followed by a test of these interpretations. In exploring the implications of these two main interpretations of identity dispersion, several additional factors come to light that suggest a different third interpretation may be more correct. The implications of this are then discussed.

2 Identity Theory

Within identity theory, an identity is defined as the set of meanings that are held by a person in terms of what it means to be who one is in a role (e.g., police person, truck driver, student), a social category or group (e.g., American, Black, PTA member), or the kind of person one is (e.g., dominant, moral, outgoing) (Burke and Stets 2009). Each of these role identities, social identities, or person identities, are meanings the person holds for the self, and others attribute to the person. These meanings come to be known both to the person and others through their mutual interaction in situations where the others respond to the person in terms of the role, group, or category occupied by the person. Over time, these meanings are modified by experience and learning and they become internalized into an identity standard. Persons then act to maintain and reproduce these meanings through the verification process.

The verification process operates as a perceptual control system whereby persons monitor identity-relevant meanings in the situation and compare those meanings to the meanings held in their identity standard. These situational meanings are often in the form of reflected appraisals or what meanings that persons think others attribute to them. If the perceived situational meanings match the identity meanings, that is, the identity is verified, the person responds with positive feelings and heightened esteem and continues to act as he or she has been (Burke and Stets 2009; Powers 1973; Stets and Burke 2014a). If, however, the perceived situational meanings are disturbed and become discrepant from the meanings held in the identity standard, this is nonverification, and the person becomes distressed and acts to counteract the discrepancy by shifting the meanings in the situation until the perceptions once again match the standard (Burke and Stets 2009).

For example, if one perceives that others in the situation feel he or she is less moral than indicated in the identity standard (reflected appraisals), the person becomes upset and/or angry and may engage more strongly in moral ways, letting both self and others see the higher level of morality. On the other hand, if one perceives others as thinking one is excessively moral (relative to the identity standard), the person also will become distressed and act in a less moral manner to change the situational

meanings and bring the reflected appraisals back to being in line with the identity standard (Burke and Harrod 2005). In a sense, this is a constant dance to maintain consistency between the perceived meanings in the situation and the meanings in the identity standard despite disturbances that may upset this balance. By keeping identity relevant meanings in the situation consistent with the identity standard, the identity is maintained and both self and others understand who one is and what to expect in interaction.

Much of the work in identity theory has viewed the meaning of an identity as a point on some dimension of meaning, for example, academic responsibility. Thus, a person may see herself as being a person with a certain level of academic responsibility. Reflected appraisal meanings would also be measured as a point on the academic responsibility dimension of meanings. When the meanings that define an identity are not located at a single point along a semantic dimension, but are distributed along that dimension, perhaps as a probability density, we have what is termed an identity dispersion.

The idea of an identity dispersion has become of some interest in recent years, especially in terms of its consequences for the individual. Two interpretations of dispersion have been discussed, each leading to different consequences.¹ On the one hand, in identity theory, such variability in identity meanings may indicate a degree of flexibility or acceptance of a range of meanings used to define the self and provide a protection against the negative impact of identity nonverification. On the other hand, in social identity theory, such variability or inconsistency in the meanings used to define the self may indicate uncertainty in one's identity, which has an aversive feeling and may lead to lower self-esteem (Hogg 2007). I turn now to discuss each of these two interpretations of identity dispersion and its impact on the self. Following this I discuss a study that brings together data on five identities (gender, friend, worker, student, moral) to test the negative impact of uncertainty and/or the positive impact of flexibility.

3 Identity Flexibility

Central to identity theory is an understanding of the meanings in the identity standard. Meanings are bipolar responses to, for example, self as masculine or feminine. A measure of traditional gender identity meanings ranging from very masculine to very feminine can be constructed (Burke and Tully 1977; Osgood et al. 1957; Stets and Burke 1996). One person may have a moderately masculine gender identity, while another has a quite feminine gender identity. These gender identity meanings are points along the underlying scale, more feminine or more masculine. Long ago the concept of androgyny was introduced as one way to help understand persons whose gender identity contained a mixture of meanings, some more masculine and some more feminine (Bem 1974). The original thought was that such mixtures allowed persons to be more flexible in their gender role performances.

Burke (1980) suggested that such flexibility might be represented as a distribution along the scale that ranges in meaning from very masculine to very feminine. A distributed identity contains a range of meanings that people hold for themselves, a variety of meanings with which they are comfortable both portraying and being portrayed by. A person with such a distribution of gender meanings may be more adaptable or flexible to engage in a variety of interactions that called for more masculine meanings at one time and more feminine meanings at other times (Stets and Burke 1996). This idea of adaptability or flexibility can be applied to any dimension of meaning in any identity. A person with a more distributed identity may be comfortable portraying a variety of meanings and be able to interact more comfortably across a variety of situations (Burke 1980).

With respect to the verification of an identity, if people are comfortable with a distribution of meanings for, let's say, their gender identity, then receiving feedback that does not exactly match an identity standard (but is within the acceptable distribution) is less of a problem because of the variety of meanings that are acceptable. Reflected appraisals that they are somewhat more feminine than the standard is okay because they are comfortable with more feminine representations. Similarly, reflected appraisals that are somewhat more masculine than the standard are similarly acceptable. The degree to which a given amount of non-verifying feedback is distressing is much diminished compared to an equal degree of nonverification if their identity were at a single point on an underlying scale. Cantwell's (2016) work on the distributed identity with respect to the student identity showed that those whose identity meanings were spread across a wider (acceptable) range, reacted with less negative emotion and less reduction in self-esteem to nonverification (reflected appraisals that did not correspond to the center of the distribution of meanings) compared to those who had an identity with a narrower spread of meanings. The wider the dispersion of acceptable meanings, the less reactive is the person to a given degree of non-verification.

Cantwell examined the student identity and measured both the mean and dispersion of respondents' student identity (along a dimension of academic responsibility). Some students were more academically responsible, and others were less so. Also, some students had a wider dispersion of acceptable meanings along this dimension than others. It was clear in Cantwell's work that for both persons with narrower distributions of meanings on their identity standard as well as for persons with a wider distribution of meanings, the further that reflected appraisals were from the center of the distribution, the more they suffered increases in negative emotion and reductions in two components of self-esteem: worth and efficacy.

However, for those with a wider distribution (more dispersion), the same amount of discrepancy between the identity standard (as the central point of the distribution) and the reflected appraisals produced less negative reactions with respect to emotion and esteem than that same discrepancy for respondents with a narrower distribution. It appeared that the wider distribution of meanings in the identity for some respondents served as a buffer to the negative effects of nonverification (discrepancy) on emotion and esteem, thus indicating the greater flexibility the person has with the identity meanings.

Based on this logic and data, the first hypothesis is that if greater dispersion indicates greater flexibility in the identity, then:

H1: The negative impact on the components of self-esteem and positive emotions of identity nonverification will be diminished as the dispersion of identity meanings is increased.

If the wider distribution of meanings for the identity indicates a greater flexibility and acceptance of a wider range of meanings as describing the self, then that flexibility will diminish the impact of nonverification. Note that this hypothesis involves an interaction: the relationship between non-verification and negative feelings depends upon the level of dispersion in the identity.

4 Identity Uncertainty

In the above, the distribution of meanings that identify a person represents flexibility and acceptance of this wider range of identity meanings. Another interpretation is possible. The distribution of meanings that identify a person may represent uncertainty with respect to the identity defining meanings. Personal uncertainty about who one is, that is, a personal sense of doubt or ambiguity of self-views has been shown to be an aversive state that motivates behavior to reduce it (van den Bos 2009). This uncertainty has two components: a stable individual component and variable situational fluctuations. The stable component reflects a relatively continuous or constant sense of doubt or ambiguity that does not vary by situation. Separately, there is the uncertainty induced by some situations that make one more certain or less certain about who they are. Following Hogg's (2009) theoretical developments, I am interested more in the stable individual component of uncertainty about the self rather than the situationally induced and varying component, because the self is the critical organizing principle, referent point, or integrative framework for diverse perceptions, feelings, and behaviors (Rosenberg 1979).

Uncertainty-identity theory (Hogg 2007) is a part of social identity theory in psychology which suggests that when people have uncertainty about the self, they find this state aversive (Greco and Roger 2003) and devaluing of the self. Uncertainty-identity theory suggests that those with high uncertainty are motivated to identify with or join groups that can help reduce the aversive feeling by providing meaning and focus for the individual, which in turn can enhance self-feelings and reduce negative emotions. As a theory about the motivation to identify with or join groups, uncertainty-identity theory grew out of the failure of earlier attempts in social identity theory to understand the motivation for joining groups as a self-enhancement processes (Hogg 2007). The self-enhancement that accompanies joining a group may result from joining the group if the group verifies the identity and provides coherent meanings, rather than be a cause for joining the group. By going back to the principles of social categorization which underlay all of social identity theory, it was suggested that social categorization itself reduced uncertainty and was the underlying motivation for joining groups (Hogg and Abrams 1993). Indeed, as Hogg

(2007) points out, this idea was present in many of the earlier writings, though it was not developed.

One early experiment (Hogg and Grieve 1999) showed the effect of uncertainty on group affiliation. They used a manipulation to create in participants a high or low level of uncertainty about their ability to carry out a complicated task. All the participants were then put in groups in which the level of in-group bias was measured. A high level of in-group bias indicates a stronger level of identification with the group. It was found that those exposed to the high uncertainty condition held significantly more ingroup bias than those not exposed to the uncertainty manipulation and they had a higher level of self-esteem. Situational uncertainty thus appeared to motivate people to identify more strongly with their group, which both reduced their level of uncertainty and increased their self-esteem. Replications of this basic experiment with variations in the manipulation of uncertainty continued to show the same results (Hogg and Grieve 1999).

In the present research, however, we will not be manipulating uncertainty in the situation, but will measure the more stable individual component (van den Bos 2009) by examining the degree of variability in the meanings individuals hold in their identity standards. That is, the meanings they apply to themselves are variable or dispersed rather than fully coherent.

To the extent that a wide dispersion of identity meanings around a central point is the result of or is reflective of uncertainty about the self, I would expect from uncertainty-identity theory that this dispersion, as an aversive state, would lead to lower levels of self-esteem and higher levels of negative emotion. This leads to our second hypothesis:

H2: The greater the dispersion of a person's identity meanings around a central point, the lower will be the components of the person's self-esteem and the higher will be feelings of negative emotion.

We thus have two hypotheses about the effects of identity dispersion. From uncertainty-identity theory, dispersion represents uncertainty in the self, and leads to lower self-esteem and feeling bad. From identity theory, identity dispersion represents flexibility of the self and provides protection against the negative effects of identity nonverification. Study 1 tests these hypotheses by analyzing data consisting of measures of dispersion in identity meanings, variability in nonverification, negative emotion, and the self-esteem components [worth, efficacy, and authenticity (Stets and Burke 2014b)]. I use the components of self-esteem rather than a summary score to allow for variation across the different components.

5 Study 1

5.1 Sample

Data were obtained from a survey administered to students at a large, ethnically diverse, southwestern university in 2011. The students were offered extra course credit for their participation. The response rate was 85% with a total of 326 individuals. The respondents were 65% female and 35% male. The average age was 21. They were ethnically diverse with 22% Asian, 36% Latino/a, 17% white, 13% black, 6% who classified themselves as multiracial, and 6% other. Parental income was coded at the midpoint of a category that was identified (out of eight categories ranging from \$7500 to \$125,000). The median income was \$42,500. These means are typical for the classes from which the students were drawn.

5.2 Measures

Measures of identity meanings and reflected-appraisal meanings (to measure identity discrepancy or nonverification) were obtained for five different identities: gender, friend, worker, student, and moral. The bipolar items used to measure the identity meanings for each identity are given in Table 1, along with factor loadings, indicating that the meanings for each identity formed a single factor with high omega reliability scores (Heise and Bohnstedt 1970). The student and moral identity measures are taken from Stets and Burke (2014b), the other measures were developed using discriminant function procedures (Burke and Tully 1977) for the present study.

The eight semantic differential items for gender identity as shown in Table 1 were taken from the Personal Attributes Questionnaire (PAQ) as the most discriminating items that distinguished male and female self-ratings (Spence and Helmreich 1978). The items for worker and friend were newly created. For each identity, the respondents were presented with each set of bipolar characteristics given in the table and asked to indicate where they fell between the two, where 1 represented one end of the continuum, 7 represented the other end of the continuum, and 4 was between the two. For example, on the gender identity scale, the person would rate themselves on the seven-point bi-polar scale for item six in response to the stem “As a man/woman I am...” somewhere between “not at all understanding of others” and “very understanding of others”. All the items were then standardized, aligned in one direction, and averaged to get a gender identity standard.

In addition, the three components of self-esteem (self-worth, efficacy, and authenticity) are measured using the scales developed by Stets and Burke (2014b) along with a negative emotion scale. Following the Stets and Burke procedure, I analyze separately each of the esteem components as there may be differential effects on each that would be hidden by combining all three components into one score. The items, loadings, and reliabilities are given in Table 2. For the esteem components, responses

Table 1 Items, factor loadings, and reliabilities for each identity scale (N = 318)

<i>Gender</i> (Ω for self-ratings and reflected appraisals = 0.87 and 0.88)		
1. Not at all able to devote self completely to others	Able to devote self completely to others	0.61
2. Not at all helpful to others	Very helpful to others	0.74
3. Not at all kind	Very kind	0.68
4. Not at all aware of the feelings of others	Very aware of the feelings of others	0.67
5. Not at all self-confident	Very self-confident	-0.49
6. Not at all understanding of others	Very understanding of others	0.81
7. Very cold in relations with others	Very warm in relations with others	0.71
8. Go to pieces under pressure	Stand up well under pressure	-0.51
<i>Friend</i> (Ω for self-ratings and reflected appraisals = 0.93 and 0.95)		
1. Trustworthy	Not trustworthy	0.78
2. Not supportive	Supportive	-0.71
3. Loyal	Not loyal	0.66
4. Encouraging	Not encouraging	0.70
5. Not caring	Caring	-0.79
6. Helpful	Not helpful	0.73
7. Not sincere	Sincere	-0.76
8. Not giving	Giving	-0.74
9. Reliable	Not reliable	0.58
10. Not committed	Committed	-0.71
<i>Worker</i> (Ω for self-ratings and reflected appraisals = 0.87 and 0.92)		
1. A follower	A leader	-0.47
2. Hardworking	Not hardworking	0.71
3. Not dependable	Dependable	-0.52
4. A team player	Not a team player	0.59
5. Organized	Disorganized	0.53
6. Not motivated	Motivated	-0.73
7. Creative	Not creative	0.61
8. Competitive	Not competitive	0.43
9. Not prompt	Prompt	-0.68
10. Not efficient	Efficient	-0.77
<i>Student</i> (Ω for self-ratings and reflected appraisals = 0.77, 0.83)		
1. Sensitive	Insensitive	0.40
2. Non-competitive	Competitive	-0.45
3. Studious	Non-studious	0.60
5. Hardworking	Not hardworking	0.75

(continued)

Table 1 (continued)

6. Antisocial	Social	-0.31
7. Open-minded	Close-minded	0.50
8. Immature	Mature	-0.65
10. Irresponsible	Responsible	-0.75
<i>Moral</i> (Ω for self-ratings and reflected appraisals = 0.91, 0.94)		
1. Honest	Dishonest	0.68
2. Caring	Uncaring	0.75
3. Unkind	Kind	-0.79
4. Unfair	Fair	-0.79
5. Helpful	Not helpful	0.66
6. Stingy	Generous	-0.51
7. Compassionate	Hard hearted	0.55
8. Untruthful	Truthful	-0.70
9. Not hardworking	Hardworking	-0.59
10. Friendly	Unfriendly	0.59
11. Selfish	Selfless	-0.53
12. Principled	Unprincipled	0.58

are along a four-point scale ranging from strongly agree to strongly disagree. Items are aligned and summed to obtain the scale score on each of the esteem components.

For the negative emotion, responses to feeling the various six emotions shown in Table 2 are on seven-point scales ranging from 0 (not at all) to 6 (extremely). Again, these measures are unidimensional and have high reliability.

To measure identity dispersion, I first measure the identity standard as the mean of the standardized items that capture the meanings of the identity. Next, I measure the variability of individual item responses around that mean. I illustrate this with the gender identity measure, though all the identity dispersions are measured in the same way. The eight gender identity items were standardized and averaged to obtain the gender identity standard for the individual. On this scale, for example, a score of 1 indicates that the person had a score one standard deviation above the mean of all respondents (more feminine). This gender identity score for each respondent can be interpreted as the *expected score* for that respondent’s answer to each of the eight (standardized) items. Departures from this expected answer (the identity standard) on the items capture the variability in the measured responses. For example, a person may answer three items as 1, 1, 1 for an average of 1 (no variability), while another individual may answer as 0, 1, 2 also for an average of 1 but with variability in the responses. The amount of variability in the self-ratings on gender identity meanings can then be measured for each respondent by calculating the dispersion (standard deviation) of the answers around this average (expected) score.

Table 2 Items, factor loadings, and reliabilities for measures of the components of self-esteem and negative emotion (N = 318)

<i>Worth</i> ($\Omega = 0.91$)	
1. I feel I am a person of worth, at least on an equal basis with others	0.73
2. I feel that I have a number of good qualities	0.82
3. I take a positive attitude toward myself	0.79
4. On the whole, I am satisfied with myself	0.74
5. I usually feel good about myself	0.75
6. I feel I have much to offer as a person	0.75
7. I have a lot of confidence in the actions I undertake in my life	0.78
<i>Efficacy</i> ($\Omega = 0.84$)	
1. There is no way I can solve some of the problems I have (R)	0.65
2. I have little control over the things that happen to me (R)	0.75
3. There is little I can do to change many of the important things in my life (R)	0.65
4. I feel as if what happens to me is mostly determined by other people (R)	0.55
5. I certainly feel helpless at times (R)	0.73
6. Sometimes I feel that I'm not able to accomplish what I want (R)	0.63
7. I often feel unable to deal with the problems of life (R)	0.77
<i>Authenticity</i> ($\Omega = 0.90$)	
1. I feel most people don't know the "real" me (R)	0.73
2. I find I can almost always be myself	0.78
3. I feel people expect me to be different than I really am (R)	0.66
4. I think most people accept who I really am	0.71
5. I just wish I were more able to be myself (R)	0.77
6. I feel the way in which I generally act reflects the "real" me	0.75
7. I often do not feel I am myself (R)	0.79
<i>Negative emotion</i> ($\Omega = 0.86$)	
1. Happy (R)	0.49
2. Sad	0.74
3. Guilty	0.76
4. Angry	0.79
5. Shame	0.81
6. Fear	0.78

$$\sigma = \sqrt{\frac{\sum_1^8 (Item - Expected)^2}{8}}$$

Those persons with a large dispersion can be viewed as having either a high degree of flexibility or a high degree of uncertainty with respect to their gender identity. This

measure is called the gender identity dispersion. This procedure is used to measure the identity dispersion of all five identities used in this study.

To illustrate these dispersion measures as applied to the gender identity for two persons, Fig. 1 shows the standardized gender identity scale and dispersions for two persons, one with a low dispersion (25th percentile) centered at -0.49 , and the other with a high dispersion (75th percentile) centered at 0.14 . The individual item ratings around the mean gender identity of the eight items for these two persons are also shown as the solid (for the low dispersion person) or hollow circles (for the high dispersion person) at the bottom of the figure.

To measure identity discrepancy, that is the degree to which an identity is not verified, I measure the degree to which one’s reflected appraisals depart from the identity standard. Thus, for each identity, the same items as used to measure the identity standard were also used in the survey to measure the reflected appraisals, or how respondents thought others saw them. That is, each respondent rated the items with respect to the stem “As a [worker] others see me as...” The reliabilities for these reflected appraisal measures are given in Table 1, along with the items used for each scale. For each item in the identity scale, the squared difference between the self-rating on the item and the reflected appraisal (RA) rating on the item was measured and averaged across items for each of the identity scales used.

$$\text{discrepancy} = \frac{\sum_1^8 (RA - \text{self-rating})^2}{8}$$

Table 3 presents the means, standard deviations, and correlations among all the measures.

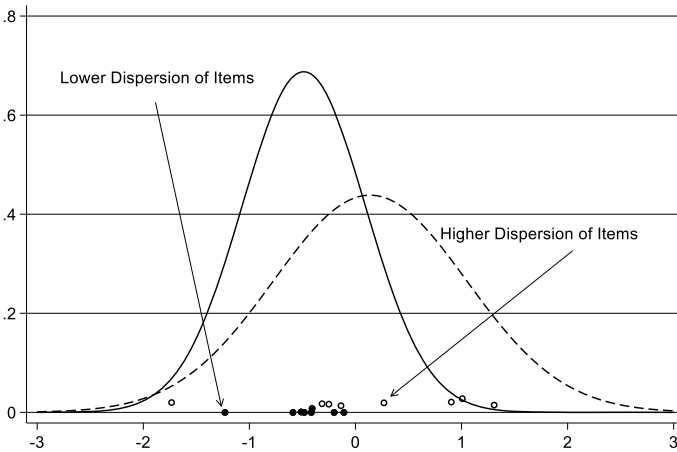


Fig. 1 Illustration of low dispersion function and points (25th percentile) and high dispersion and points (75th percentile) of gender identity

Table 3 Means, standard deviations, and correlations among variables (N = 318)

Variables	Mean	Std.	Correlations												
			1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Dispersion</i>															
1. Gender	0.78	0.28													
2. Friend	0.62	0.41	0.32												
3. Worker	0.79	0.34	0.28	0.27											
4. Student	0.88	0.27	0.36	0.22	0.30										
5. Moral	0.78	0.30	0.47	0.44	0.34	0.41									
<i>Discrepancy</i>															
6. Gender	0.87	0.46	0.57	0.18	0.19	0.28	0.36								
7. Friend	0.83	0.66	0.21	0.66	0.28	0.17	0.33	0.17							
8. Worker	0.80	0.54	0.22	0.25	0.55	0.22	0.25	0.24	0.37						
9. Student	0.84	0.40	0.26	0.18	0.22	0.41	0.27	0.37	0.22	0.36					
10. Moral	1.02	0.56	0.38	0.33	0.23	0.29	0.60	0.44	0.40	0.40	0.40				
<i>Esteem components</i>															
11. Worth	3.19	0.53	-0.19	-0.09	-0.23	-0.09	-0.11	-0.16	-0.16	-0.20	-0.16	-0.22			
12. Efficacy	2.83	0.49	-0.14	-0.14	-0.29	-0.16	-0.19	-0.19	-0.17	-0.25	-0.19	-0.13	0.51		
13. Authenticity	2.79	0.59	-0.28	-0.21	-0.23	-0.20	-0.22	-0.23	-0.22	-0.25	-0.27	-0.27	0.59	0.55	
14. Negative emotion	1.25	1.06	0.30	0.23	0.19	0.17	0.22	0.12	0.14	0.24	0.21	0.14	-0.37	-0.39	-0.42

5.3 Analysis

To test the hypotheses, structural equation models were estimated that predict emotion and each of the esteem components as a function of identity dispersion, identity discrepancy, and the interaction of the two. Correlations among the error variances for each of the esteem components were allowed. To account for the few instances of missing data, the method of maximum-likelihood missing values allowed all valid data to be used in the estimates.

6 Results

The results of the analysis for the gender identity are presented in the top panel of Table 4. These results are discussed in detail, as they provide a framework for

Table 4 Effects of identity dispersion and identity discrepancy on components of self-esteem and negative emotion

	Worth	Efficacy	Authenticity	Neg. emotion
<i>Gender N = 318, 8 items</i>				
Dispersion	-0.17**	-0.05	-0.27**	0.36**
Discrepancy	-0.22**	-0.23**	-0.25**	0.02
Interaction	0.26**	0.12*	0.26**	-0.16**
<i>Friend N = 319, 10 items</i>				
Dispersion	-0.15	-0.26**	-0.29**	0.42**
Discrepancy	-0.37**	-0.43**	-0.35**	0.21*
Interaction	0.35**	0.51**	0.37**	-0.41**
<i>Worker N = 319, 8 items</i>				
Dispersion	-0.15**	-0.19**	-0.19**	0.10
Discrepancy	-0.04	0.03	-0.52**	0.32*
Interaction	0.06	0.18	0.40**	-0.13
<i>Student N = 318, 8 items</i>				
Dispersion	-0.09	-0.10	-0.11	0.11
Discrepancy	-0.29	-0.21	-0.19	0.24
Interaction	0.18	0.07	0.01	-0.09
<i>Moral N = 319, 12 items</i>				
Dispersion	-0.05	-0.30**	-0.22**	0.29**
Discrepancy	-0.42**	-0.34**	-0.48**	0.24*
Interaction	0.27*	0.43**	0.38**	-0.30*

* $p \leq 0.05$
 ** $p \leq 0.01$

understanding the results for the other identities. Included in the model are identity dispersion, identity discrepancy (nonverification), and the interaction of the two. Hypothesis two predicts, according to uncertainty-identity theory, a negative impact on self-esteem and emotion for persons who have a larger dispersion (interpreted as uncertainty). Table 4 shows the results. Looking first at the self-worth component of self-esteem, we see the negative effect of dispersion on self-worth for the person with an average amount of discrepancy ($\beta = -0.17, p \leq 0.01$), thus supporting Hypothesis two.

Hypothesis one predicts a negative effect of identity discrepancy (nonverification) on emotion and the components of self-esteem, which is moderated by the amount of dispersion (interpreted as flexibility) of the identity. Table 4 also shows the effect of discrepancy on worth for the person with the average amount of dispersion (zero with standardized measures) is a significant $-0.22 (p \leq 0.01)$. The effect of the significant interaction term shows that the effect of discrepancy comes very close to zero ($-0.22 + 0.26$) for persons who are one standard deviation above the mean of dispersion as predicted in Hypothesis one. That is, for persons with a high dispersion, the effect of non-verification on emotion and esteem are very close to zero. Both hypotheses are thus strongly confirmed with respect to the effects of gender identity discrepancy and dispersion on self-worth: dispersion for average levels of non-verification has a negative outcome, while discrepancy (nonverification) for persons with high dispersion has little effect.

Turning to the second component of self-esteem, self-efficacy, we see support for Hypothesis one (negative effects of discrepancy moderated by dispersion), but the negative effect of dispersion on self-efficacy as proposed in the second hypothesis is not strong enough to be significant. Looking at the third component of self-esteem, authenticity, we see that, again, both hypotheses are strongly supported when looking at gender identity.

Finally, looking at the results for negative emotion, we see support for Hypothesis two on the negative effects of dispersion, but the negative effect of discrepancy appears to be felt only for those with very narrow dispersions. Those respondents with average dispersion do not feel negative emotion when discrepancy increases (verification decreases).

Without going into all the details for the results with respect to each of the other identities that are shown in the remaining panels of Table 4, we see this same pattern of results, though with somewhat varying significances on each of the coefficients. For example, with respect to the friend identity, the hypotheses are supported except for the effect of friend identity dispersion on self-worth, which is not significant. With respect to the worker identity, the hypotheses are fully supported only for the authenticity outcome. The effect of identity discrepancy and the interaction terms are not significant for the worth and efficacy outcomes. With respect to the student identity, while none of the effects are quite strong enough to reach significance, each is in the correct direction. The likelihood of all 12 coefficients being in the correct direction by chance is extremely small. Finally, with respect to the moral identity, both hypotheses are support for the efficacy, authenticity and emotion outcomes, but only Hypothesis one is supported for the self-worth outcome. Overall, thus, we

see a general pattern of support for the hypotheses, but there is some variability in the individual outcomes across identities which do not always reach statistical significance.

To bring these disparate results into a single analysis, the individual measures of identity dispersion across the identities were averaged into an identity dispersion score, and identity discrepancy measures across the five identities were averaged into an identity discrepancy score. An interaction term was then created by multiplying the average dispersion scores and the average discrepancy scores. To be sure that it makes sense to combine the different identity dispersion measures into a single factor and the different identity discrepancy measures into a second factor, a confirmatory factor analysis of the ten measures was performed extracting two correlated factors with no cross loadings. In this analysis, I allowed for the errors on dispersion and discrepancy to be correlated for the same identity. These results are presented in Table 5 and Fig. 2 where we see that the model fits the data well, that the dispersion measures have high loadings on the dispersion factor and zero loadings on the discrepancy factor, while the discrepancy measures have high loadings on the discrepancy factor and zero loadings on the dispersion factor.

Table 6 presents a test of the two hypotheses for each of the components of self-esteem and negative emotion using the combined measures of dispersion and discrepancy along with the interaction. The results show strong support for both hypotheses on all three components of self-esteem and negative emotion. Because the pattern of results for each of the separate identities was generally the same, combining the measure reduced measurement error and allowed us to see that pattern very clearly. We see the negative effects of dispersion in accordance with Hypothesis two. Persons with higher levels of identity dispersion have lower levels of all three components

Table 5 Factor analysis of dispersion and discrepancy correlations across identities (N = 318)

	Dispersion	Discrepancy
Gender identity dispersion	0.60	0
Friend identity dispersion	0.53	0
Worker identity dispersion	0.48	0
Student identity dispersion	0.55	0
Moral identity dispersion	0.76	0
Gender identity discrepancy	0	0.53
Friend identity discrepancy	0	0.50
Worker identity discrepancy	0	0.56
Student identity discrepancy	0	0.56
Moral identity discrepancy	0	0.77
Reliability (Ω)	0.74	0.77

Dispersion and discrepancy factors correlation: 0.75

Chi-square fit = 34.53, df = 29, $p \geq 0.22$; RMSEA = 0.025

Not shown are the estimated error covariances between dispersion and discrepancy of the same identities

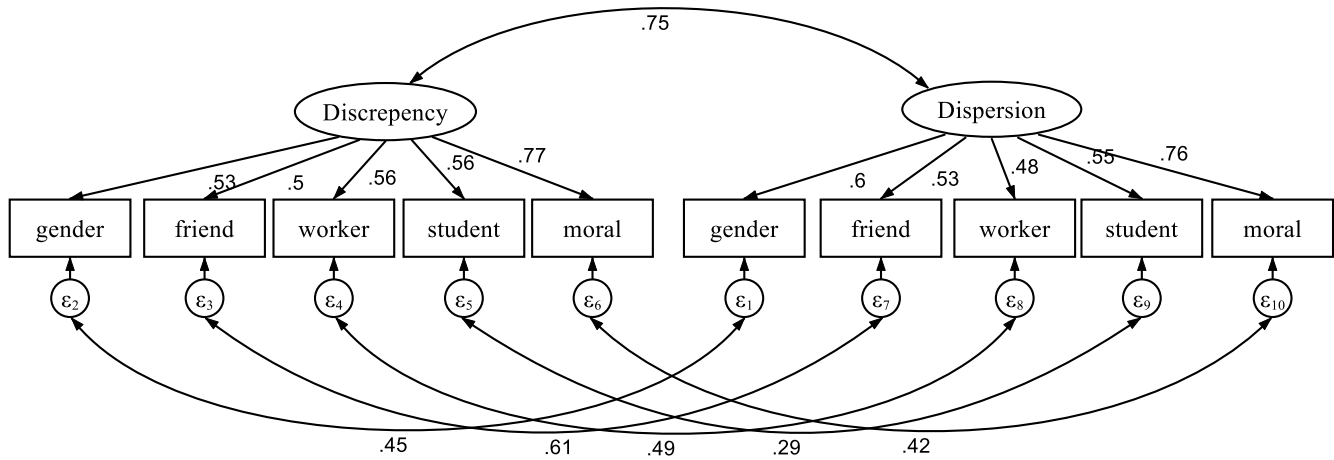


Fig. 2 Confirmatory factor analysis of dispersion and discrepancy correlations across identities (N = 318) goodness of fit: $\chi^2(6) = 34.53$, $p = 0.22$, RMSEA = 0.025

Table 6 Effects of identity discrepancy and identity dispersion on components of self-esteem using combined measures (N = 318)

	Worth	Efficacy	Authenticity	Neg. emotion
Dispersion	-0.31**	-0.35**	-0.33**	0.41**
Discrepancy	-0.70**	-0.79**	-0.76**	0.40*
Interaction	0.67**	0.75**	0.72**	-0.46*

* $p \leq 0.05$
 ** $p \leq 0.01$

of self-esteem and higher levels of negative emotion. At the same time, we see the negative effects of identity nonverification (discrepancy) on all components of self-esteem when people have the average amount of dispersion, but this effect is reduced as the amount of dispersion increases so that the negative effect of discrepancy is removed for those who have dispersion one or two standard deviations above average. Thus, dispersion has a positive effect to reduce the negative impact of identity nonverification.

Dispersion, thus, has both positive and negative effects on emotion and the components of self-esteem. Now, the interaction term in the regression model, which has been interpreted as a moderator for the effects of discrepancy, can also be interpreted as a moderator for the effects of identity dispersion. Interaction terms can be viewed either way. The negative effect of identity dispersion on self-esteem shown in the tables, is the effect for persons with average levels of identity discrepancy or nonverification. As identity discrepancy diminishes from the average level by one standard deviation, that is, as identities become more verified, the negative effects of identity dispersion increase. To understand this, think of verified inconsistencies in contrast to unverified inconsistencies. Inconsistencies that are verified have a stronger negative effect.

Clearly, dispersion is particularly bad for persons with very high levels of identity verification. For example, with respect to efficacy as an outcome, the effect of a one standard deviation increase in dispersion at average levels of discrepancy in Table 6 is to decrease efficacy by 0.35. This effect becomes -1.10 ($= -0.35 - 0.75$) for persons who have one standard deviation more verification (less discrepancy) than average. On the other hand, the negative effects of identity dispersion are reduced for persons with a less well verified identity and may even become a beneficial effect of dispersion. For example, the effect of a unit change in dispersion is to decrease efficacy by 0.35 as already mentioned, but this effect becomes $+0.40$ ($= -0.35 + 0.75$) for persons who have one standard deviation greater discrepancy. Identity nonverification protects people from the negative effects of identity dispersion. These effects are shown graphically in Fig. 3.

This last set of analyses using the composite measures of dispersion and discrepancy across all five of the identities raises some interesting questions about the natures of dispersion and discrepancy. To create these composite measures, I first showed that the measures of dispersion across the different identities are all highly

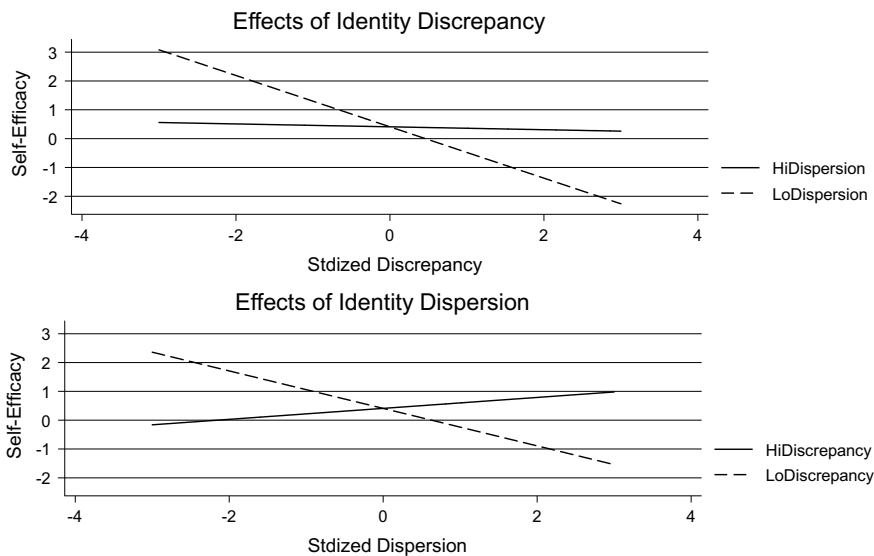


Fig. 3 Illustrating how identity dispersion moderates the effects of identity discrepancy and identity discrepancy moderates the effects of identity dispersion

correlated as are the measures of discrepancy across the different identities. Indeed, the omega reliability for each combined construct is about 0.77. What are the implications of the fact that if a person has a high (or low) dispersion on one identity, that person likely also has a high (or low) dispersion on another identity; similarly, for identity discrepancy?

Having a high or low dispersion or a high or low discrepancy score seem to be characteristics of a person—some people have greater (or lesser) dispersion in all their identities, and some people seem to be able to verify (or not) all their identities. Indeed, we saw that dispersion and discrepancy are moderately correlated (.75 in Table 5). Is it possible that difficulty in verifying an identity leads one to have a more dispersed set of identity meanings as they explore creating identity meanings that will be verified? Is it also possible that having a more dispersed identity results in greater difficulty verifying the identity? Study 2 explores these issues. Data from the marital roles study, a longitudinal study carried out annually over three years (Tallman et al. 1998) will allow us to understand these processes better and see the impacts of dispersion and discrepancy on each other over time. With measures of the spousal identity over three points in time, Study 2 can begin to disentangle the causal impacts of dispersion and discrepancy on each other.

7 Study Two

The marital roles study was a longitudinal study that investigated marital dynamics in the first three years of marriage (Tallman et al. 1998). The sample was drawn from marriage registration records in 1991 and 1992 in two mid-sized communities in Washington state. It consists of couples who were over age 18, who were involved in their first marriage, and who had no children. The data for the current analysis are based on information from the interviews in all three data-collection periods.

7.1 Sample

There were 574 couples applying for marriage licenses who appeared to be eligible for the sample. Of these, 286 couples completed all the data-collection in the first round. A 15% attrition occurred from Year 1 to Year 2, and an additional 4.2% attrition from Year 2 to Year 3. These numbers do not include the 13 couples who were separated or divorced after Year 1, nor the 16 couples who were separated or divorced after Year 2, who were no longer included in the sampling frame. Couples who dropped out of the study after the first or second year were more likely to be young ($p < 0.01$), less highly educated ($p < 0.01$), and of lower socioeconomic status ($p < 0.05$) (Burke and Stets 1999).

7.2 Measures

Eight items were used to measure the spousal identity (Burke and Stets 1999). These items, their factor loadings, and reliability are given in Table 7. Respondents rated

Table 7 Items, factor loadings, and reliabilities for items measuring spouse identity (N = 624)

Item	Loading
1. Cleaning the house	-0.67
2. Preparing and serving meals	-0.73
3. Washing, ironing and mending the clothes	-0.79
4. Home repair	0.83
5. Yard work	0.72
6. Shopping for groceries	-0.67
7. Providing the family income before children are born	0.67
8. Providing the family income after children are born	0.77

Spousal identity ($\Omega = 0.91$)

each of 8 spousal role activities in terms of the degree to which they felt that they themselves *should engage in that role activity* (own identity standard), and the degree to which they felt that their spouse should engage in that activity. Responses ranged from a low of doing “none of the activity in the household” to doing “all of the activity in the household” (coded 0–4). Following the earlier procedures of Study 1, the means of the eight (standardized) items were used to measure the spouse identity standards for everyone. To measure spouse identity dispersions, the same procedures that were indicated in Study 1 were used to measure the variability of the eight items around the mean rating.

The spouse identity discrepancy was measured as the difference between the self-rating of how much individuals should engage in the activity and the rating on that item showing how much their spouse felt they should engage in the activity.² These scores were then squared and averaged to provide the measure of discrepancy.

Measures of two esteem components previously used by Cast and Burke (2002) were also included: self-worth and efficacy. The self-worth scale consisted of seven items and had an omega reliability of 0.88. The efficacy scale consisted 9 items and had an omega reliability of 0.85. These scales were developed from items included in the self-administered portion of the interview.

7.3 Analyses

With this new identity and data set, I want to first try to replicate the effects we found in Study 1 showing the impact of identity dispersion, identity discrepancy, and the interaction of the two on the self-esteem components.³ I then explore the effects of identity dispersion on identity discrepancy as well as the effect of discrepancy on dispersion over time to understand the positive relationship between these two constructs. With measures gathered at three points, each separated by a year, it is possible to estimate the separate effects of each variable on the other.

8 Results

Before looking at the causal relationships of dispersion and discrepancy, Table 8 presents the results that replicate the findings in Study 1 showing the effects of dispersion, discrepancy, and their interaction on the two components of self-esteem that were measured: self-worth and efficacy. This analysis was carried out three times, once for each year of the longitudinal study. We see in these results that the earlier effects are replicated. Persons with higher levels of dispersion suffer a loss of both self-worth and efficacy. We also see that identity discrepancy has a negative effect on worth and efficacy, and the significant interaction shows that this effect is diminished for persons who have higher dispersions in their spousal identity. We can

Table 8 Effects of spouse identity discrepancy and identity dispersion on components of self-esteem (N = 623)

	Year 1	Year 2	Year 3
<i>Self-worth</i>			
Dispersion	-0.12**	-0.16**	-0.15**
Discrepancy	-0.13**	-0.14**	-0.16**
Interaction	0.11*	0.14*	0.16*
<i>Efficacy</i>			
Dispersion	-0.13**	-0.19**	-0.15**
Discrepancy	-0.14**	-0.16**	-0.15**
Interaction	0.08*	0.18*	0.11*

* $p \leq 0.05$
 ** $p \leq 0.01$

now examine the mutual effects of dispersion and discrepancy on each other over the three time-periods.

The model that was used to estimate the causal relationships between dispersion and discrepancy is given in Fig. 4 along with the results. Not shown are the correlated error terms for dispersion and discrepancy, which were not significant, indicating that these causal relationships between the two fully explain their positive correlation. These results show that dispersion has a moderate and positive effect on discrepancy and discrepancy has a roughly equal effect on dispersion. These effects are the same at both time 1 to time 2 and time 2 to time 3.

I also note that the stability coefficients, that is the effects of each variable on itself one time-period later, for both discrepancy and dispersion appear to be moderately

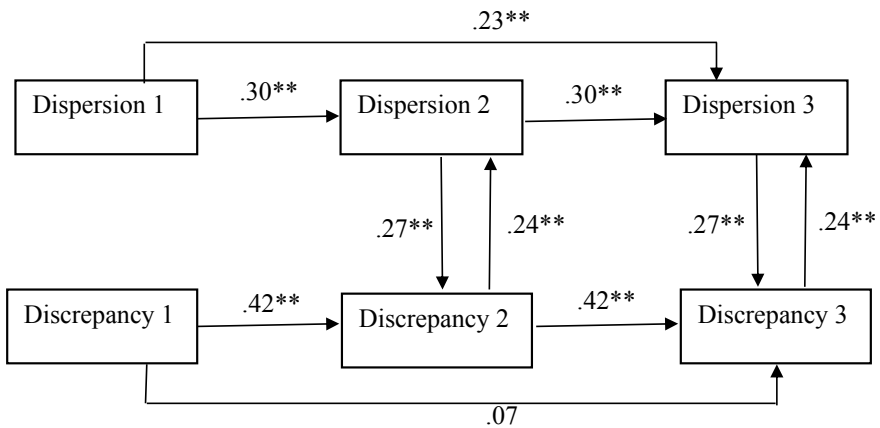


Fig. 4 Mutual effects of discrepancy and dispersion of spouse identity over time. Goodness of fit: $\chi^2(6) = 2.26, p = 0.90$. Not shown are the non-significant error covariances between discrepancy and dispersion at time points two and three

Table 9 Transitions among high and low identity dispersion groups between first and final interview

First interview	Final interview		Total
	Low dispersion	High dispersion	
Low dispersion	158 (77%) (63%)	47 (23%) (30%)	205 (100%) (50%)
High dispersion	98 (47%) (37%)	111 (53%) (70%)	209 (100%) (50%)
	256 (60%) (100%)	158 (39%) (100%)	4144 (100%) (100%)

strong. Indeed, remembering that the time points are separated by a year, the equivalent *monthly* stability coefficients are 0.87 for dispersion and 0.93 for discrepancy. These stabilities indicate that it takes some time for exogenous factors to modify dispersion or discrepancy over time. For comparison, I calculated the stability coefficients for the spouse identity standard over the three years. This effect was very large: 0.83, which translates to a monthly stability of 0.98. The spouse identity standard is almost unchanging from month to month. This is considerably more stable than either the dispersion or discrepancy measures.

To gain another view of the stability of the spousal identity dispersion over time, the dispersions of the spousal identities for all time periods were divided into high and low dispersion at the median across time. A cross-tab of the high/low split at the beginning of the study and the end of the study was created to see the extent to which individuals change from high to low dispersion or low to high over the interval, and the extent to which individuals remained high or remained low. These results are given in Table 9.

We see in Table 9 that the stability of the identity dispersion measure over the three years occurs primarily because those who had less than average identity dispersion tended to remain low dispersion over that time (77%). Of those who had high identity dispersion at time one, about half (47%) became low dispersion by the third interview. It thus appears that there is a tendency for low identity dispersion persons to stay low, but for persons with high spouse identity dispersion to become low dispersion. This would be consistent with high identity dispersion being an aversive state from which people generally try to escape and move to low dispersion. There is some movement from low dispersion to high dispersion over the three-year period (23%), due, perhaps, to problems with verifying their spouse identity (recall that problems of verification lead to an increase of identity dispersion). Indeed, the persons who changed from low to high identity dispersion over that time had significantly higher levels of spousal identity discrepancy (non-verification) at time 1 ($p \leq 0.001$).

We also see in Table 9 that about half (209) of the respondents had above average levels of spousal identity dispersion at the start of the study and only 39% (158) had above average levels of dispersion by the final interview, with the movement of persons from high to low dispersion being significantly greater than the movement

from low to high dispersion. An important question is why there were so many high dispersion respondents at the beginning of the study.

Perhaps the biggest factor for the initial dispersion measures is that the spousal identity is a new identity for all the respondents; the respondents had been recruited because they were just married within the past few months and had never been married before. This new identity is just being formed. Self-meanings are changing from whatever they were to what they are now with this new status. What does it mean to be a spouse? With a new identity, it is to be expected that there would be some initial uncertainty and/or flexibility with respect to the identity that would likely diminish over time.

In addition, I found that those respondents with higher education levels had less identity dispersion ($p \leq 0.01$), as did those with higher occupational status ($p \leq 0.01$) or age ($p \leq 0.01$). Many of these respondents initially were still in school, so that by the last interview they had significantly higher levels of education, occupational status, as well as age, than at the beginning. These factors would lead to higher levels of dispersion at the beginning with the levels diminishing over time. Since having more or fewer resources is an individual characteristic, this would affect all the identities held by the individual. An analysis of dispersion as a function of having a baby among these newly married couples during the three years of the study showed that individuals who experienced the birth of a child also experience an increase in the level of dispersion in their spouse identity ($p \leq 0.01$). Thus, disruptive life events can result in increased identity dispersion, and this would likely be true for all the identities the individual holds.

A final analysis may shed some light on the nature of the dispersion and the question of whether it represents uncertainty or flexibility. Looking at the spousal identity itself (rather than the dispersion or the discrepancy) over time, I have shown that the spouse identity has a very high stability coefficient of 0.83 over a year, or 0.98 over a month. I now repeat this analysis, but for two groups: those with higher than average dispersion of the spouse identity at the beginning of the study and those with lower than average dispersion. The results, as given in Fig. 4, show high levels of stability for both groups. Indeed, there is no significant difference in the stability coefficients between the two dispersion groups, or between the time 1 to 2 coefficients and the time 2 to 3 coefficients. The pooled estimate for this year-long stability is 0.90. An equivalent month-long stability coefficient would be 0.99 (Fig. 5).

These results raise the question that if a high dispersion represents uncertainty, then how are such high stabilities over the course of a year possible? Persons with above average dispersion have equally stable spouse identities as persons with low dispersion; stable almost to the point of unchanging. The respondents seem to be quite sure what their spousal identity is a month later, and even a year later. Perhaps the dispersion is not due to uncertainty, but rather is the result of a mixture of identity meanings about which the person is certain, but which are not fully consistent with one another. This would be harmonious with the idea that it is the *incongruity* of the different meanings defining the identity (responses to different items), rather than uncertainty, that produces the lower self-worth and efficacy, even if the persons are certain that those meanings define who they are as spouses. These incongruities could

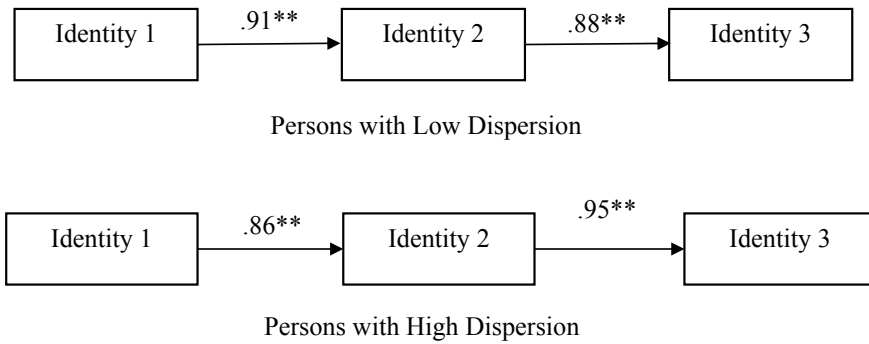


Fig. 5 Stability effects of spouse identity over time for persons with low dispersion (Top Panel) and persons with high dispersion (Bottom Panel) with no constraints. There were no significant differences in the coefficients between the two groups

create a degree of cognitive dissonance, a strongly aversive state (Festinger 1957). Perhaps over time the incongruities diminish as each of the components changes to be more like the others as has been suggested in earlier work (Burke 2003).

9 Discussion

It has been a long journey through this research, with many findings. I started with the idea of identity dispersion, or the variability of identity meanings around the central point of the identity standard, which has recently become of interest from two theoretical approaches. Identity theory views dispersion as resulting from the flexibility of an individual to interact in a variety of situations, each requiring slightly different self-in-role meanings (Burke 1980). Uncertainty-identity theory (Hogg 2007) views an individual's uncertainty with respect to their self-meanings resulting in greater identity dispersion. Identity uncertainty would result in negative outcomes for self-esteem, while identity flexibility would result in positive outcomes protecting against the negative effects of identity non-verification.

The present research began by examining both interpretations of dispersion for five different identities: gender, friend, worker, student, and moral. The results appeared to support both hypothesized effects, positive and negative. Dispersion, controlling for discrepancy, has a negative impact on all three components of self-esteem (worth, efficacy, and authenticity) and emotion. At the same time, it has the positive impact of reducing the negative effects of identity nonverification (discrepancy) on esteem components and emotion. It appears that dispersion has both the hypothesized negative and beneficial effects on emotions and esteem.

However, further examination of the dispersion and discrepancy measures across the five identities in Study 1 showed three additional important results. First, dispersion in one identity was correlated with dispersion in the other identities. Second,

discrepancy in one identity was correlated with discrepancy in the other identities, and third, identity dispersion is positively correlated ($r = 0.6$) with identity discrepancy or nonverification. The first two of these results imply that levels of identity dispersion and identity discrepancy are characteristics of persons and are manifest in many or all of their identities; A person who has high (low) dispersion (discrepancy) on one identity likely has a high (low) dispersion (discrepancy) on other identities. The third result suggests that there is some sort of causal connection between dispersion and nonverification leading us to wonder whether difficulty in verifying an identity leads to a greater dispersion in the meanings of that identity or having a higher dispersion of meanings in one's identity makes it more difficult to verify the identity?

Study 2 pursued an examination of the nature of the causal connection between dispersion and discrepancy using longitudinal data from the marital roles study (Tallman et al. 1992, 1998). It appears that both causal processes are operative. Higher discrepancy or nonverification at one time appears to increase dispersion later, and, independently, higher dispersion at the earlier time increases discrepancy at the later time. Additionally, it was found that both dispersion and discrepancy have moderately high stability coefficients from one year to the next. The implied stability coefficient for one month indicates a very high level of stability for both dispersion and discrepancy. Thus, not only are dispersion and discrepancy the result of some personal characteristic, that characteristic seems quite stable over a time-span of two or three years.

Perhaps most revealing of the nature of dispersion was another finding in Study 2 that the stability of the spouse identity itself was very high: 0.90 for a year, implying a stability of 0.99 for a month. This level of stability for the spouse identity raised some serious questions about the nature of the dispersion. If dispersion represented uncertainty about the identity as suggested by Hogg (2007, 2009), this high level of stability of the spouse identity standard would not exist, that is, people would not be consistent from year to year. These results also call into question the interpretation of dispersion as an aversive state that is the result of uncertainty about one's identity. It may be aversive, but it is not the result of uncertainty. A different interpretation is called for, one that accounts for the stability of dispersion, its positive consequences of reducing the negative effects of nonverification, as well as the negative consequences of its being an aversive state.

I suggest that identity dispersion is due to varying amounts of real inconsistency in the identity meanings that people hold. Some people seem to incorporate more inconsistency in their identity meanings than do others—and they seem to do it with many or all their identities. These inconsistent identity meanings are held with high levels of certainty. Because the level of certainty is high, these meanings can be reproduced on a survey even a year later. This level of inconsistency of meanings in the high dispersion identity, however, would lead to cognitive dissonance and produce the aversive state that results in lower self-esteem and more negative emotion.

At the same time, the array of (inconsistent) meanings in the more dispersed identity would also reduce the impact of nonverification because the identity is, in fact, defined with a wider array of meanings held by the person. With the wider

array of meanings, any reflected appraisal that was nonverifying for one of the held meanings, may be verifying with respect to another, thus making at least partial verification more likely. With a narrow range of self-meanings in the identity, any reflected appraisal that was nonverifying for one identity meaning would likely be nonverifying for most identity meanings.

This is illustrated in Fig. 6, which shows two persons with different identity dispersions for the academic identity, but with the same midpoints and the same reflected appraisals. The reflected appraisals miss the meanings for the person with the narrow dispersion (A) but come close to some of the identity meanings for the person with the wider dispersion (B).

In this way, both the aversive character of identity dispersion due to cognitive dissonance among the meanings and its protective character because of the wider spread are accounted for. And, because the meanings are strongly held, the high level of stability of the identity itself is also explained.

The causal analyses in Study 2 showed that identity dispersion is maintained by trouble in verifying those identities. Or, to put it another way, verification (low discrepancy) reduces the level of dispersion. This can be understood by recalling that when identities are not verified, people begin to act to reduce the discrepancy between reflected appraisals and the identity standard, but at the same time, the identity standard begins to slowly shift toward the meanings in the reflected appraisals (Burke 2006; Burke and Stets 2009; Cast et al. 1999). When verification occurs in an identity that has wider dispersion, some of the identity meanings will be verified, but

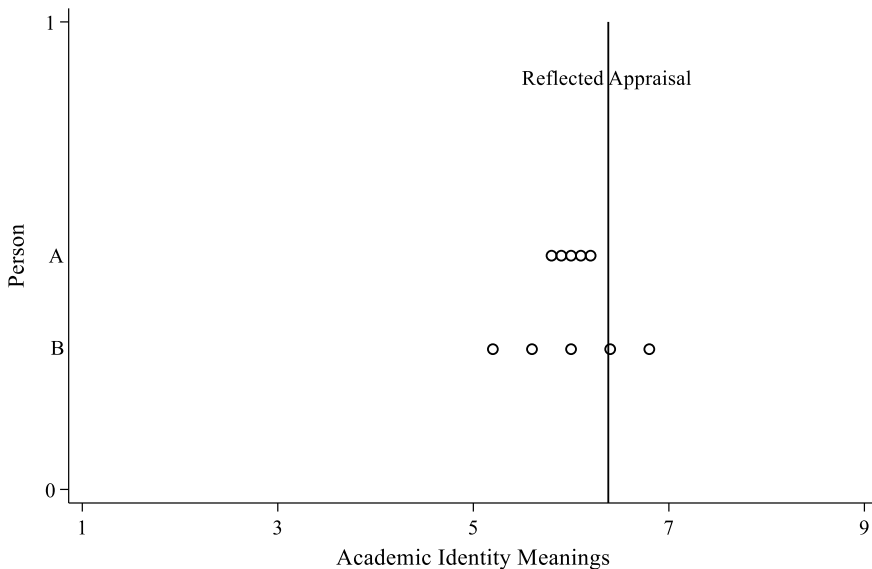


Fig. 6 Range of academic identity meanings for two persons, showing same reflected appraisals for each

those that are not verified will begin to adjust toward the reflected appraisal meanings bringing them toward convergence and reducing the dispersion.

Individuals with more resources will have the power to keep reflected appraisals toward the center of the spread of identity meanings compared to individuals with few resources. This would result in persons who have more resources, because of their position in the social structure, holding identities that have lower dispersion, as was observed in Study 2. And, this presence or absence of resources would result in most of their identities being less or more dispersed, accounting for the individual characteristic of holding many high or low dispersion identities. This makes it appear that dispersion is an individual characteristic, when it is likely due to an individual's location in the social structure and the resources they control as well as the events that happen because of that position.

Let me summarize where we are after all of this. Identity dispersion is the distribution of the meanings of an identity along a semantic dimension rather than being at a single point. High identity dispersion is an aversive state for a person that decreases positive emotion and self-esteem. In the present study, dispersion is not the result of a person's uncertainty about the meanings in an identity or of their being comfortable with a distribution of meanings, but, rather, of holding disparate meanings with a high degree of certainty. It is the cognitive inconsistency of the disparate identity meanings that likely produces the aversive state.

These results do not have implications for uncertainty identity theory because, as it turned out, dispersion in this study is not the result of uncertainty. The evidence is that uncertainty (whether or not associated with dispersion) itself is an aversive state (Hogg 2007, 2009), just as is cognitive dissonance (Festinger 1957).

Identity dispersion is both a cause and consequence of identity nonverification (high discrepancy). Like identity discrepancy, identity dispersion is a stable and persistent condition, though high dispersion tends to diminish over time. Identity dispersion and identity discrepancy are characteristics that tend to be shared across the different identities of an individual. High dispersion is a condition that tends to protect individuals against the negative impact of identity nonverification. This effect appears to be due not to people being comfortable with a range of identity meanings, but rather because the nonverification of one identity meaning in the dispersion is likely to be verification of another identity meaning, thus reducing the overall negative impact of the nonverification.

In sum, identity dispersion is an important characteristic of an identity that seems to have both negative and positive effects on self-verification and self-esteem. The present research has shown that because of its central role in self-processes, future research should take it more into account to gain a better understanding of these self-processes.

Endnotes

1. BayesACT, a generalization of affect control theory, holds a third understanding of dispersion as informational uncertainty that has neither positive nor negative impact on one's subjective experience (Schröder et al. 2016). Because no impact on the self or self-esteem is expected, this view of dispersion is not discussed.
2. We would ideally like to have measured how each participant thought their spouse evaluated them, but this data was not available. Instead, we use the actual appraisals of the spouse as a proxy for the reflected appraisals.
3. There was no measure of emotion in this data.

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